HEMICORALLIUM JOHNSONI.

Corallium johnsoni, Gray, P. Z. S. 1860, p. 394. B.M.
"Zoophyte parasitic on a coral."—*J. Y. Johnson, MS.*
Hab. Madeira (*J. Y. Johnson; Free Museum, Liverpool*).

7. On *Placospongia*, a New Generic Form of *Spongiadæ* in the British Museum. By Dr. JOHN EDWARD GRAY, F.R.S., V.P.Z.S., F.L.S., &c.

The British Museum received in 1851, from Admiral Sir Edward Belcher, a specimen of a hard calcareous body said to have come from Borneo; and in the sale at Stevens's sale-room in 1852 we purchased two other specimens, from what was understood at the time to be the remaining part of the collection that had been formed by Admiral Sir Edward Belcher during the surveying voyage.

The bodies have much the appearance of the underground rhizome of a plant with a number of scars whence leaves or flowering branches have separated; but when more closely examined, it will be found that what appears to be a scar is a separate plate. And when so examined they have so much the appearance of a very large kind of Nullipore or *Melobesia* that, when I first observed them, I believed that they were probably corals covered with large plates of a *Melobesia*, differing in size and form on the various parts of the specimens, and giving them an angular appearance, caused by the overlapping of the different fronds of this calcareous Alga; and I therefore proposed to transfer them to the Botanical Collection in the British Museum.

An examination by the microscope at once dispelled this idea; for the surfaces of the white chalk-like plates, even under a low power, are seen to be distinctly areolated as if formed of small grains; and when the plates and the white chalk-like axis were more minutely examined under a higher power they were found to be entirely formed of transparent, more or less globular or oblong siliceous masses, with a regularly granulated surface, evidently formed of spicules radiating from the centre to the circumference, and forming the granular surface exactly like what are called the *ovaria* of *Geodia* and its allies. Also the space between the central axis and the plates in a transverse fracture was filled with a rugose yellow granular matter, which proved to be sarcode strengthened with bundles of siliceous pin-shaped spicules (with a distinct head and a tapering point), which diverge from the axis to the inner surface of the external plates.

After this examination there could be no doubt that this was a sponge differing in internal structure and external form from any sponge yet described. I therefore propose to form it into a genus, to be called *Placospongia*, which I regard as the type of a new family, and, indeed, of a separate group of sponges, which may be called *Stony Sponges*, thus characterized:—Sponge consisting of a hard central

axis covered externally with separate laminæ; the axis and laminæ composed of closely adherent siliceous globules with a granular surface, and separated from each other by a layer of sarcode armed with siliceous spicules.

The genus may be thus described :—

Placospongia.

The sponge hard, angular, stony, angularly branched. The axis solid, formed of closely packed siliceous globules with an areolated tubercular surface, and covered with variously shaped hard plates of similar tubercular siliceous globules, having an areolated appearance on the surface under the microscope. The outer plates differ greatly in size and form; but they meet at the edges, and rarely one edge slightly overlaps the other, giving the sponge an angular appearance. The axis is separated from the superficial plates by a continuous layer of sarcode furnished with bundles of nearly parallel pin-shaped spicules, which form columns diverging at right angles from the outer surface of the axis to the inner surface of the outer plates. The external plates are increased in size by the addition of new matter on the circumference, leaving indistinct concentric lines of growth on the outer surface. It is the manner of growth that makes them look so like the fronds of a large *Melobesia*.

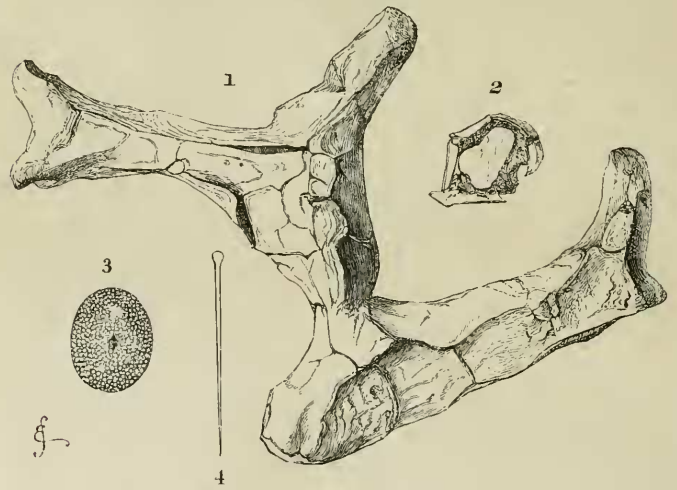

Fig. 1. *Placospongia melobesioides*, Gray.
2. Cross fracture, showing the axis, sarcode, and outer laminæ.
3. Siliceous globule.
4. Pin-shaped spicule of sarcode.

Placospongia melobesioides.

Var. 1. Sponge thick, with short angular branches, chalky white.
Hab. Borneo. B.M.

Var. 2. Sponge slender, with a few distant angular branches, pale purplish red.

Hab. Borneo? (1851, *Capt. Sir E. Belcher*). B.M.

The two varieties were purchased at the same time, in Stevens's sale-room, in 1852. They present just the same differences in colour as are to be observed in different specimens of *Melobesiæ* and *Corallinæ*; and there is no doubt that the purplish-red specimen will become white by exposure.

8. On some Collections of Birds from Veragua.

By Osbert Salvin, M.A., F.L.S., F.Z.S., &c.

(Plate XIV.)

The three collections of birds which form the materials for the present paper were collected at three different localities in Veragua, by Enrique Arcé, a native of Guatemala, who formerly worked for Mr. Godman and myself when travelling in the latter country. Having become proficient in bird-collecting, he undertook to go to Costa Rica, where he remained some months; he then proceeded to Panama, and thence to the ground where these collections were made. The first and largest was from a village called Santa Fé, which Arcé describes as situated twelve leagues on the Panama side of Santiago, the capital of Veragua; the next was from the neighbourhood of Santiago itself; and the third from a district beyond Santiago, which Arcé calls the "Cordillera de Tolé." Neither this district nor Santa Fé are marked in any map that I have seen. All three localities would seem to enjoy a "*tierra templada*," or cool mountain-climate, in their vicinity; and the presence of a Dipper (*Cinclus*) in the last named indicates that our traveller reached a considerable elevation. The collection also contains many birds which are found only in the lowlands, showing that Arcé also visited the hot forests of low elevation.

Before proceeding to enumerate the species contained in these collections, I will shortly mention the notices that have been published from time to time of the birds of this section of Central America, viz. that which is included between the political frontier of Costa Rica and the Panama Railway.

The first notice which I can find referring to the birds of Veragua is in the 'Proceedings' of this Society for the year 1850, p. 92, where Mr. Gould describes *Cephalopterus glabricollis* from a specimen obtained by the botanical traveller M. Warszewicz in the Cordillera of Chiriqui. In a subsequent paper, published in the same year (p. 162), six new species of *Trochilidæ* (*Selasphorus scintilla, Thaumatias chionurus, Thalurania venusta, Sapphironia cæruleogularis, Erythronota niveoventris*, and *Trochilus* (—?) *castaneoventris*) were described by the same gentleman from specimens furnished by M. Warszewicz, and collected between David and the Chiriqui Lagoon. A seventh species from the same collection was also described by